

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) Victor F. Petrenko
Serial No. 09/976,210
Filed October 11, 2001
For High-Frequency Melting Of Interfacial
Ice

Examiner Quang T. M.
Group Art No. 3742
Confirmation No. 1402

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July 8, 2004

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Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.97(b), or
(Within three months of filing national application, or date of entry of national application, or before mailing date of first office action on the merits, whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☐ a \$180 fee under 37 CFR 1.17(p), or
(After the CFR 1.97(b) time period, but before final action or notice of allowance, which ever occurs first)
- ☒ under 37 CFR 1.97(d) together with a:
☐ Statement under 37 CFR 1.97(e)(1) or (2), and
☒ a \$180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action, a notice of allowance, on or before payment of issue fee)

Please charge to Deposit Account 12-0600 the sum of \$180.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account 12-0600 pursuant to 37 CFR 1.25.

☐ Applicant(s) submit herewith Form PTO 1449 – Information Disclosure Citation together with copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of the application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

☒ Applicant(s) submit(s) herewith Form PTO 1449 – Information Disclosure Citation without copies of U.S. patents or U.S. publications, but includes copies of foreign patents, publications or other information of which Applicant(s) is/are aware, which applicant(s) believe(s) may be material to the examination of the application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

PATENT

Attorney Docket No.: 393551

Express Mail Label No.: EL927873721US

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56(c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counter part foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith

It is requested that the information disclosed herein be made of record in this application

Respectfully submitted,

LATHROP & GAGE LLC



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2345 Grand Boulevard, Suite 2400
Kansas City, Missouri 64108
Tel No: 816/460-5826
Fax No: 816/292-2001

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 5

Complete if Known

Application Number	09/976,210
Filing Date	October 11, 2001
First Named Inventor	Victor F. Petrenko
Art Unit	3742
Examiner Name	Quang T. Van
Attorney Docket Number	393551

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Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		1,157,344	10-19-1915	E. Thomson	
		1,656,329	01-17-1928	E. G. Sievert et al	
		2,496,279	02-07-1950	Ely, et al.	
		2,870,311	01-20-1959	Greenfield	
		3,204,084	05-07-1963	J.G. Spencer, Jr.	
		3,316,344	04-25-1967	Kidd, et al.	
		3,316,345	04-25-1967	Toms, et al.	
		3,526,920	06-21-1966	Byers	
		3,790,752	02-05-1974	Boaz et al	
		3,825,371	07-23-1974	Roder, et al.	
		3,835,269	09-01-1974	Levin, et al.	
		3,915,883	10-01-1975	VanMeter, et al.	
		3,971,056	07-01-1976	Jaskolski, et al.	
		4,054,672	10-01-1977	Inoue, et al.	
		4,082,962	04-01-1978	Burgsdorf, et al.	
		4,085,338	04-01-1978	Genrikh, et al.	
		4,137,447	01-30-1979	Boaz	
		4,190,137	02-26-1980	Shimada, et al.	
		4,278,875	07-14-1981	Bain	
		4,296,298	10-20-1981	Macmaster, et al.	

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Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		SU26363	08-1931	Unknown		
		SU587548	01-05-1978	Nikonets, et al.		
		SU936040	06-15-1982	Osoboe Znak Pocheta		
		CN1079578	12-15-1993	Long		
		EP1168888	01-02-2002	Nippon Sheet Glass Co. Ltd.		
		GB2259287	03-10-1993	Golls Royce		
		FR2570333	03-21-1986	Mendola		
		JP5292638	11-05-1993	Sumitomo Electric Ind.		
		JP7023520	01-24-1995	Sumitomo Electric Co.		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 5

Complete if Known

Application Number 09/976,210
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First Named Inventor Victor F. Petrenko
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Examiner Name Quang T. Van
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		Number - Kind Code ² (if known)			
		4,321,296	03-23-1982	Rougier	
		4,330,702	05-01-1982	Cheng	
		4,330,703	05-18-1992	Horsma, et al.	
		4,376,598	03-01-1983	Brouns, et al.	
		4,638,960	01-27-1987	Straube, et al.	
		4,651,825	03-01-1987	Wilson	
		4,690,353	09-01-1987	Haslim, et al.	
		4,737,618	04-12-1988	Barbier, et al.	
		4,760,978	08-02-1988	Schuyler, et al.	
		4,773,976	09-27-1988	Vexler	
		4,814,546	03-01-1989	Whitney, et al.	
		4,875,644	10-01-1989	Adams, et al.	
		4,887,041	12-01-1989	Mashikian, et al.	
		4,897,597	01-30-1990	Whitener	
		4,950,950	08-01-1990	Perry, et al.	
		4,974,503	12-01-1990	Koch	
		4,985,313	01-15-1991	Penneck et al	
		5,109,140	04-01-1992	Nguyen	
		5,112,449	05-01-1992	Jozefowicz, et al.	
		5,144,962	09-08-1992	Counts et al	

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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		JP11041768	2/12/1999	Fujikura Ltd.		
		JP57060684	4/12/1982	Nippon Koei Co. Ltd		
		GB2 252 285 A	8/15/1992	British Aerospace Public Limited Company		
		DE44 40 634	7/25/1996	Gustin		
		WO 94/20819	9/15/1994	Innovative Dynamics, Inc.		
		WO 95/30495	11/16/1995	Donnelly Corporation		

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Sheet 3 of 5

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		Number - Kind Code ² (if known)			
		5,218,472	06-01-1993	Jozefowicz, et al.	
		5,330,291	07-01-1994	Heath, et al.	
		5,344,696	09-06-1994	Hastings et al	
		5,398,547	03-21-1995	Gerardi, et al.	
		5,411,121	05-01-1995	La Forte, et al.	
		5,441,305	08-15-1995	Tabar	
		5,496,989	03-05-1996	Bradford et al	
		5,511,288	09-03-1996	Geraldi, et al.	
		5,523,959	06-01-1996	Seegmiller	
		5,551,288	09-03-1996	Geraldi, et al.	
		5,555,736	09-17-1996	Wills, et al	
		5,586,213	12-01-1996	Bridges, et al.	
		5,630,360	05-01-1997	Polny Jr.	
		5,744,704	04-01-1998	Hu, et al.	
		5,861,855	01-01-1999	Arsenault, et al.	
		5,873,254	02-01-1999	Arav.	
		5,902,962	11-01-1999	Gazdzinski	
		5,947,418	09-07-1999	Bessiere, et al.	
		6,018,152	01-25-2000	Allaire, et al.	
		6,027,075	02-22-2000	Petrenko	

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		Number - Kind Code ² (if known)			
		6,031,214	02-29-2000	Bost, et al.	
		6,102,333	08-01-2000	Gerardi, et al.	
		6,129,314	10-10-2000	Giamati, et al.	
		6,134,096	10-01-2000	Yamada, et al.	
		6,145,787	11-14-2000	Rolls	
		6,218,647	04-01-2001	Jones, et al.	
		6,270,188	08-01-2001	Ichikawa	
		6,330,986	12-18-2001	Rutherford et al	
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		6,396,172	05-01-2002	Couture	
		6,427,946	08-06-2002	Petrenko	
		6,478,259	11-01-2002	Cordaro	
		6,492,629	12-01-2002	Sopory	
		6,550,508	04-01-2003	Yamaguchi, et al.	
		6,570,333	05-01-2003	Miller, et al.	
		6,576,115	06-01-2003	Petrenko	
		5,012,868	05-01-1991	Bridges	
		6,194,685 B1	02-27-2001	Rutherford	

FOREIGN PATENT DOCUMENTS

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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				

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OFFICE OF PETITIONS**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"Icing Wind Tunnel", Meeting the Challenges of Ice Testing In a World-Class Facility – BF Goodrich Aerospace Ice Protection Systems, 4 pages	
		"New Goodrich Wind Tunnel Tests Advanced Aircraft De-Icing Systems", by Edward H. Phillips, Uniontown, Ohio, Aviation Week Magazine, Oct. 3, 1998, 3 pages.	
		"The Evolution of Ice Protection Creates a Revolution Ice Detection", BFGoodrich Aerospace Ice Protection Systems, 2 pages, No date.	
		AIA 94-0714, "Interface Influences Upon Ice Adhesion to Airfoil Materials", by A. Reich, BF Goodrich Aerospace/De-Icing Systems, Brecksville/Uniontown, OH (32nd Aerospace Sciences Meeting and Exhibit, January 10-13, 1994) pages 1-8	
		Electromechanical Phenomena in Ice; Victor F. Petrenko; Thayer School of Engineering Special Report 96-2; Feb. 1996.	
		Generation of electric fields by ice and snow friction, by Victor F. Petrenko and Smauel C. Colbeck, (May 1, 1995), pp. 4518-4521.	
		Khusnatdinov N N et al: "Electrical Properties Of The Ice/Solid Interface" Journal Of Physical Chemistry. B, Materials, Surfaces, Interfaces And Biophysical, Washington, D.C. US Vol. 101, 07-17-1997, pages 6212-6214	
		The effect of static electric fields on ice friction; Victor F. Petrenko; J. Appl. Phys. 76 (2), Jul. 15, 1994; 1994 American Institute of Physics.	

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